

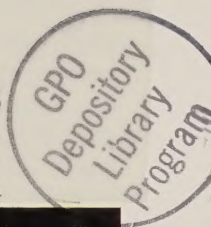
Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

Reserve
aQH541
.5
.R52U85
1989

Using Beaver to Improve Riparian Areas

20 NOV 1989



CATALOGING PREP

Wood River RC&D Area
Gooding, Idaho
July 1989

Using Beaver to Improve Riparian Areas

Riparian areas, those narrow strips of land situated along the banks of streams and rivers, are receiving a lot of attention these days because of their importance for diverse wildlife populations, water quality and quantity, grazing value, and recreation.

Many riparian areas have deteriorated for a variety of reasons, including overgrazing, removal of beaver, road construction, logging, mining, recreational use, farming activity, and irrigation diversions.

A project started in 1985 by land users and agencies in the Wood River RC&D Area in south-central Idaho is proving that beaver can help revitalize and stabilize degraded riparian areas. Participating in the project are the U.S. Department of Agriculture Soil Conservation Service and Forest Service; Bureau of Land Management; Idaho Department of Fish and Game; Idaho Department of Lands; soil conservation districts; and private landowners.



Beaver Project Results

The reintroduction of beaver to streams has resulted in dramatic improvement of riparian areas. These benefits are applicable to many western stream situations:

- Elevated water table, providing subirrigation in the area adjacent to the stream and leading to better vegetative development for erosion control.
- Reduced water velocity and eroding power of the stream, leading to sediment deposition rather than erosion.
- Enhanced fish habitat within ponds, including increased water depth, water temperature layers, increased food production, and reoxygenation of water as it falls over beaver dams.
- Reduced sedimentation and better water quality because of less streambank erosion and channel degradation.
- Reduced high spring flows since water storage is provided in upstream watersheds.
- Improved stream flows and water storage throughout the summer and drought years.
- Improved nesting and brood rearing areas for waterfowl in ponds and surrounding areas.
- Increased herbaceous and woody vegetation, providing additional forage for domestic livestock, big game, and other upland wildlife.

Methods are being developed to discourage beaver from building dams in places they're not wanted, such as road culverts and irrigation diversions.



Some Facts about Beaver

Beaver are the largest rodent in North America, measuring nearly 4 feet long and weighing 30 to 60 pounds.

Beaver have two to four kits per litter. Kits are usually born in June and stay with parents until two years of age.

Beaver's preferred food is bark of aspen, alder, willow, poplar, and cottonwood. During spring and summer, they eat grass, forbs, sedges and other aquatic and riparian plants.

Dam building generally takes place August through early October. Dam maintenance is continual and usually during the night.

Beaver Management

Based on the Wood River RC&D Area experience, here are tips for beaver management.

Where beaver already exist

- When an established colony exists and is not a nuisance, regulated trapping to manage populations may be needed. Request advice from local wildlife officials for permissible numbers to trap.
- If too many beaver are trapped, dams will fail, and the condition of riparian areas will start to degrade.
- Look for signs of overpopulation: Cutting of evergreens for use in dam building, fighting, low reproductive success, and migrant beaver activity creating problems with neighboring landowners.

In transplant areas

- It is possible to transplant beaver to suitable areas that have been trapped out. To be successful, there must be cooperation between adjacent landowners and local wildlife officials. A cooperative evaluation of existing habitat quality and potential adverse beaver activity is very important.
- Transplant beaver during their principal dam building period--late summer or early fall (August-October). Beaver transplanted at this time are also less likely to migrate out of the area. Transplant three to five beaver, preferably from the same colony, to a site. A breeding pair makes the most successful transplant.
- Do not harvest beaver in newly established colonies for at least three years if adequate food is available.
- Grazing may need to be withdrawn for 1 to 2 years, depending on the riparian condition. When resumed, use a livestock grazing

system designed to benefit riparian vegetation.

- Expect the beaver to cut and use a large number of trees for dam construction during the first year or two after transplant.
- Structurally sound building material may need to be brought into marginal habitat sites for beaver use. Place aspen that is 4 to 5 inches in diameter, in 4- to 8-foot lengths, next to the stream. Beaver will travel from 200 to 300 yards for building material.

The Wood River RC&D Area

The Wood River RC&D Area covers Blaine, Camas, Gooding, and Lincoln Counties in Idaho. Sponsors include soil conservation districts, county commissioners, and towns. RC&D objectives are to plan for resource development, economic improvement, and conservation projects or measures.

Technical and financial assistance to carry out RC&D activities are provided by the Soil Conservation Service, who is responsible for administering the program. Many other Federal, State, and local agencies also provide assistance.

All programs and services of the Soil Conservation Service are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, age, marital status, or handicap.

